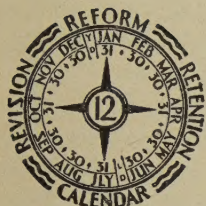


# JOURNAL OF CALENDAR REFORM

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## BAR ASSOCIATION HEARING

*An Address by the President of The World Calendar Association  
Before the Committee on Commerce of the  
American Bar Association, April 11, 1933*

IT IS a strange series of historical mistakes and mischances that has given us the erratic calendar which we use today. Our chief need, of course, is the application of a simple remedy that will restore to it the perpetual and constant quality that it possessed under Julius Caesar. Pope Gregory, whose name our present system bears, recognized this requirement at the time of his calendar adjustment 400 years ago, but narrow traditionalism, mass indifference and ignorance prevented the accomplishment of a complete reform. Now, I think, the world is ready, and the need for change is recognized and emphasized by the rapid strides which have been made in transportation, communication and the interdependence of nations. To our generation is given the privilege of transmuting an irregular, shifting and inconvenient calendar into a balanced, perpetual and simple one.

As you gentlemen are aware, there has been some discussion, both for and against the perpetual feature of the proposed revision of the calendar, whereby the weekday sequence of the year is stabilized and rendered constant and unvarying. For example, in The World Calendar every year will begin on Sunday the first day of the year and the week, and Saturday will fall on the seventh day of the new year and the week. This rotation is repeated until the completion of the 52 weeks. The method by which

this result is accomplished is to consider the calendar year as having 364 days, thereby making the total exactly divisible into seven-day weeks and into equal quarters of three practically identical months. Then, to keep the calendar scientifically accurate with the solar year, the odd 365th and last day of the year is added to the end of December as a stabilizing day. This stabilizing day is called Year Day and is treated as an extra or double Saturday. The procedure in regard to it is similar to that used by travelers when they cross the international date line in the Pacific Ocean.

It would be too much, of course, to hope that there would be nobody who would oppose basically and fundamentally any reform of the calendar. To such opposition, however, we can only reply that change is inevitable in the forward march of progress, and that, in this spirit of progress, time will work its miracles and smooth out the objections of those who are inclined to oppose any change now. The World Calendar is so great an improvement over the existing system, and the transition from the old order to the new is so simple and easy, that after its adoption people will wonder why any objections to the reform were ever raised.

The most important innovation in calendar reform is the inauguration of the stabilizing day, the year-end day to be known as Year Day. When regarded as a double Saturday, it offers to the world an added day of worship or of recreation. Regarded in this light, the day has a high spiritual value. It becomes a holiday, or holy day, in the fullest and best sense of the word. In leap years, the extra day now added to February is placed at the end of June and called Leap Day; it is treated exactly like Year Day, as a holiday for worship or recreation.

The reasons which have convinced most of those who have compared the merits of the two proposed plans of calendar reform are, in a few words, that The World Calendar of 12 months is the more simple, practical, economical, orderly and efficient method of remedying the defects of the old calendar. In comparison, the 13-month plan is revolutionary, awkward, confusing, impractical and costly. It accomplishes no important calendar need that is not fully achieved by the simpler revision.

It goes without saying that a 13-month calendar cannot be evenly divided into the quarterly and semi-annual periods that are so convenient and essential to the economic and scientific world. These divisions, in a 13-month calendar, become fractional factors, requiring difficult and complicated tables for computations. The transitional period involved in the adoption of a 13-month year would be an era of confusion, and the disarrangement of statistics and historical records would be enormous. Comparison of present and past would become a matter of guesswork, owing to the displacement of the compared periods, caused by introduction of a 13th month, and to dislocation of seasonal divisions in the general upheaval.

The increased cost of a 13-month calendar would be a serious item of

expense in many directions. There would be an extra monthly closing of all accounts and tabulations, an eight per cent increase in the number of billings and postage, 13 instead of 12 readings of meters, monthly rentals, and all other monthly operations in business, professions and homes. The legal complications involved would be very great, particularly in the adjustment of contracts, rents, leases and interest payments, with every such adjustment opening up dangerous possibilities of fresh bargaining.

The only advantage claimed for the 13-month plan which is not possessed in equal degree by the 12-month revision, is that every month would be divisible into precisely four weeks. This emphasis on the week, however, is purchased at the sacrifice of the convenient quarterly and semi-annual divisions of the year, both of which have high importance in business, finance and social life.

Considerable emphasis has been placed by advocates of the 13-month calendar upon the adoption of a four-week accounting period by several hundred business concerns, and it is held that their use of this accounting period is an argument for a 13-month calendar. The argument is a specious one, for it can be readily shown that any firm desiring to use a four-week accounting period can operate this scheme perfectly under the 12-month equal-quarter calendar. But even if the argument were valid, it might properly be pointed out that there are approximately 2,000,000 business concerns in the United States, and if 500 of them prefer to operate under a 13-month system, 1,999,500 prefer the 12-month system. The majority in favor of a 12-month calendar is numerically overwhelming.

There is another argument against the adoption of the 13-month plan which appears to me to be completely convincing and conclusive. The calendar is not merely a device invented by economists and accountants for measuring business units, comparing business records and tabulating business statistics. The calendar is a fact in human life, which must be applicable to the daily existence of men and women whatever their race, station or intelligence. Their whole life is encompassed and regulated by it; their daily living is ordered around it; their feelings, emotions and actions are inextricably tied up with it. Calendar reform must be regarded practically, in terms of the susceptibilities, conveniences and traditions of the human race. In this light, the 13-month calendar becomes an impossibility. By no stretch of the imagination can it obtain the background of comprehension and acceptance which would be necessary for its adoption.

The British have a characteristic way of expressing the purpose of calendar reform. They say that the end in view is to "tidy up" the present calendar with the least possible disturbance of the present practice. In terms of that definition, the 12-month equal-quarter calendar meets the need perfectly; the 13-month plan does not. The 12-month revision gives the required order and symmetry; the 13-month proposal overreaches the

goal. How many men or women would care to have their lives so rigidly ordered and so monotonously planned as is demanded by this mechanistic 13-month calendar, wherein every month in its structural form is fixed and dull? Excessive standardization is unpalatable, narrow and confining.

The 12-month equal-quarter plan has the superlative merit of involving a comparatively small change from the present system. The new calendar will glide into the old without any shock to business, with changes so slight as to be scarcely noticeable. Comparisons with the change will be as they are at present, while for the future there will be a new accuracy much to be desired.

The World Calendar is normal and sane in its revision. Its balance and well-proportioned arrangement are pleasing. It retains the year's divisibility into halves, thirds, fourths and sixths. In its equal quarters all the complex calendrial units agree—day, week, month and season or quarter.

As an illustration of this valuable quality let us take a corporation, composed of several departments, which function quite separately from one another yet are essential parts of and belong to the corporation. There is, for instance, one department which deals with temporary workers whose wages are computed on a daily basis. There is another department in charge of permanent employees with financial operations based on the week as a unit. The shipping and transportation sections use the month for their records; while the major financing of the corporation, including dividends, bond interests and general reports, is on a quarterly basis.

In this corporation, then, we find several calendar units in use among the different departments, each according to its special need. At the end of every quarter these units come together, which facilitates the assembling and the studying of the quarterly, semi-annual and annual reports.

The World Calendar unites all the practical requirements for comparability and convenience. Whatever the accounting or financial system, whatever the space period used in statistics or research, this plan harmonizes the diverse methods and unifies them into a balanced, ordered system. Government, business and family budgets are simplified without any increase in accounting.

And it may accomplish something more in becoming a valuable adjunct in reestablishing more balanced and harmonious conditions in the world. Owen D. Young recently said, in analyzing the business depression, "No permanency of any trend can be guaranteed unless we have sound and fair balance between all the units in our economic body. In my opinion, it was our unbalanced condition which caused our trouble."

The same trouble—unbalanced condition—exists in our present unsatisfactory calendar. Only as we correct this defect can we expect to secure a more perfect time-keeper. The World Calendar accomplishes this result. It is simple and practical, and it meets the requisites of balance, com-

parability and stability. In its arrangement it harmonizes all its various units, and equalizes and retains the divisibility of the year. All this without disturbing the essential form—a calendar of twelve months.

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In view of the fact that several new members have joined your Committee, you will approve, I believe, if I review briefly the present standing of calendar reform in its relation to this Committee on Commerce.

The revision of the calendar was first referred to the Committee five years ago. At that time it made a brief report to the American Bar Association, reviewing the history of the calendar and the general situation, and asked permission to continue further its investigation of the subject.

In the following year your Committee recommended to the Bar Association that the United States participate in international conferences and discussions upon the subject, and the Bar Association accordingly passed a resolution to that effect. The United States Government complied with the request, and ever since official American delegates have been active in international meetings.

After the hearing in 1931 your Committee issued no report. Because of the approaching International Conference which had been called by the League of Nations for October, you decided to postpone the matter in order to await the results of that conference.

Your Committee, however, had declared itself in favor of calendar reform. Your Secretary, Mr. Desvernine, in a letter of March 27, 1931, stated: "Our Committee, as you know, has committed itself to calendar reform, without recommending any particular calendar. We will probably keep the question open until after the International Conference."

At your last meeting a year ago, your Committee considered the findings of the International Conference, but, being confronted with a somewhat inconclusive report from Geneva, it deferred action until this year.

Probably all the members of your Committee will wish this year to take some definite action, at least to the extent of a progress report to the Bar Association. Your Chairman, in a letter dated December 14, wrote, "The time is approaching when the Commerce Committee will have to take a position with reference to the calendar reform to be recommended by it." In a later letter he said, "I hope and believe something will be done this year that will lead the American Bar Association to take a definite position in the matter of calendar reform."

I trust that your Committee, having long since declared itself for calendar reform, will now, after five years of study and deliberation, make its recommendation with respect to this important subject.

I come to you, of course, to urge the merits of the 12-month equal-quarter plan of revision, known in America as The World Calendar, and to oppose the 13-month proposal.

I do not appear before you merely in a personal or private capacity, but also as president of The World Calendar Association which has 6500 members active in nearly every walk of life. Our Association publishes the quarterly *Journal of Calendar Reform*, copies of which are already in the hands of the members of your Committee. As you know, the conclusion reached by our Association is that the simplest, easiest and most practical calendar to adopt is the one which retains the 12-month year.

Nor do we stand alone. The plan we advocate has the official support of the Swiss and Greek governments, and of important groups or organizations in England, France, Italy, Germany, Belgium, Scandinavia and other countries. In the minutes of the International Conference held at Geneva, where 44 countries were officially represented, you will agree there was a clearly defined sentiment in favor of the 12-month revision.

In America, official opinion is even more definite, particularly in the three government offices which are primarily concerned with questions of time. These three offices are the Time Division of the Bureau of Standards, the Bureau of Navigation of the Navy, and the Naval Observatory which regulates the Nation's clocks and watches, publishes the official *Nautical Almanac* and guards the safety of our ships and sea-going commerce.

The head of the Time Division of the U. S. Bureau of Standards is Mr. Henry W. Bearce, who is the authority to whom every official inquiry regarding time or the calendar is referred. He has recently published an exhaustive and scholarly study of calendar reform, in which he favors the 12-month revision and opposes the 13-month plan. The text of Mr. Bearce's article has already been placed in the hands of your Committee.

The head of the Bureau of Navigation of the Navy, Rear Admiral Frank B. Upham, is equally emphatic. He said, in a statement transmitted by cable to the Geneva meeting of the League of Nations: "My interest in the 12-month calendar advocated by The World Calendar Association prompted me to refer it to the Naval Observatory for comment on its merits from the point of view of that institution, the personnel of which are naval officers and astronomers. I am pleased to say that their comments are entirely favorable and they recommend its adoption. As compared with its one competitor, the 13-month calendar, it offers to astronomers and to mariners very practical advantages, none of which would be true of a 13-month calendar."

The superintendent of the U. S. Naval Observatory, Captain J. F. Hellweg, writes: "The Naval Observatory has approved very strongly The World Calendar. The benefits from this calendar are manifold and the disturbance with long established customs is the minimum."

Turning now from Washington to leaders of opinion in various trades and professions, we find the same point of view.

Speaking for banking, the internationally-known economist, H. Parker

Willis, professor of banking at Columbia University, explains very clearly: "The 13-month year would be a backward kind of reform. A 12-month year is absolutely essential, for a change in the number of months in the year would throw out of gear our whole system. The economics of the case call for the fewest and most simple changes that are absolutely requisite, in order to eliminate the evils that have been found under the old system."

Speaking for business, the late William H. Blood, Vice-President of Stone and Webster, wrote, "Changes suggested by The World Calendar are few and easy of adoption. It provides a year which is susceptible of being divided into halves and quarters without splitting the months, and by thus equalizing the halves and quarters the difficulties encountered in business enterprises and statistical comparisons would be greatly decreased and the labor lightened."

Speaking for agriculture, David Thibault, former editor of *Modern Farming*, who has extensively studied and written on the calendar, says: "Undoubtedly The World Calendar fits more closely the agricultural need. There can be no doubt that the farmer will favor that system of time reckoning which, while stabilizing and balancing the calendar, still preserves the 12-month year and effects reform without too radical departure from the present system under which he has accumulated his store of seasonal knowledge."

Speaking for education, Professor Charles C. Wylie, Secretary of the University Association for the Study of Calendar Reform, informs us: "Among educators a strong majority favors calendar reform; and there is a decided preference for the 12-month plan."

Speaking for aviation, the late Rear Admiral William A. Moffett, chief of the Bureau of Aeronautics, made the frank assertion that "The navigator wants a 12-month year, because 12 is a more convenient factor for the computations in which he is interested." Admiral Moffett concluded that a revised calendar is inevitable.

Speaking for astronomy, members of the International Astronomical Union are practically unanimous in favor of the 12-month revision as against a 13-month calendar.

Speaking for religion, the great non-Roman body, known as the Universal Christian Council, in 1929 declared for calendar reform and voted that the churches should participate in making a choice between the proposed systems. At present this Council is intensively studying the subject with a view to reaching a decision at an early date. The Roman Catholic Church is equally interested in the proposals. A Catholic viewpoint given by the foremost American Catholic authority on this subject, Father Edward S. Schwegler, is as follows: "It would be rather strange if the Church objected to calendar reform, for she herself has been one of the greatest and

most radical calendar reformers in history." The great Catholic journal, *The Commonweal*, has editorially given its support to the 12-month plan, and says: "It is greatly to be desired that the question of calendar reform should not be allowed to rest again until it has been settled in a satisfactory manner."

Furthermore, from the Eastern countries, Mahatma Gandhi of India has declared himself in favor of a 12-month revision, while Japan, leading Buddhist country, has officially voiced its opposition to any 13-month plan. An Assyrian writer, George M. Lamsa, in discussing the religious aspects of calendar reform in the Near East, states: "I am glad that the 13-month calendar has been proposed and is being actively propagandized. It will help the peoples of the Eastern World to accept the less radical changes proposed by the advocates of the 12-month equal-quarter calendar. Eastern inertia has got into the habit of opposing every change, but when two ways of change are offered, it is likely to oppose the extreme and accept the other."

And finally, speaking for the Bar, George Gordon Battle believes that most lawyers will favor The World Calendar. "This plan," he says, "appears to have all the advantages for which reform is sought, and has no apparent disadvantages. It offers a simple and perpetual system which may be achieved with very little change."

These brief comments, selected from many, express clearly the overwhelming weight of opinion for a 12-month revision.

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In conclusion, I should like to say a few words regarding the practical procedure by which the nations expect to legislate the change in our present calendar. It is essential that the new plan shall be put into effect in a year when there will be the minimum of transitional disturbance, and when the existing order of the days will be such as to maintain, during the transition, the utmost measure of chronological uniformity. Such a year, when January 1 comes on Sunday, happens to occur in 1939, and then not again until 1950. In other words, unless the change can be legislated for 1939, calendar reform will have to wait 17 years, until 1950.

For this reason, supporters of calendar reform everywhere have fixed 1939 as their goal, believing that delay until 1950 would be a mistake and a misfortune.

The League of Nations, in pursuance of this goal, will undertake its next international discussion of the question in 1935, by which time it is anticipated that the nations will be prepared to express a definite and binding preference. The United States will participate fully in this 1935 meeting.

Leadership in the international conference will naturally be expected to come from America, England, France, Germany, and Italy. It is our hope

that the United States will take its share in this leadership, just as it did in the international enactment of Standard Time, 50 years ago.

American opinion, I believe, is rapidly crystallizing in favor of The World Calendar. The same plan, under other names, has already received the official approval of certain European nations and the semi-official support of others. We hope to be able to report, before 1935, the full adherence of Great Britain, Germany and other nations. The Vatican is interested, and the Protestant churches are fully cooperative.

To secure official American action in the matter, active support of organizations like the American Bar Association is essential. The recommendation of your committee, endorsed and approved by the Bar Association in formal resolutions, will go far, I am sure, in advancing the adoption of this reform.

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## PRINTERS FAVOR REVISION

By JOHN CLYDE OSWALD

Chairman of Calendar Reform Committee of United Typothetae

**P**ROBABLY no other of the arts—certainly none of the industries—is so tied in with the calendar as is the case with printing. Much of the printshop's product is seasonal in character and therefore planned long in advance. It must appear within definite time limits. Because of that element in human nature which seems to prompt most persons to put off action until the last possible moment, the time allowed by the customer to produce a given piece of work is often insufficient, requiring constant check-up and last-minute effort on the part of the printer. Should the date pass upon which a job was to have been finished, its usefulness will be impaired and sometimes extinguished. In periodical publishing almost the first consideration is the time schedule. Editors, publishers, advertisers—all are bound by it.

Calendars were in use of course before printing was invented. Movable types first appeared in Europe less than 500 years ago. The calendar originated in unknown antiquity. As it has come down to us it is an unscientific, inefficient and awkward instrument. Considering its importance in human affairs, the wonder is that mankind has put up with it so long.

The purpose of a calendar is to fix dates and to measure time and it should be so devised as to perform both these functions in the best possible way. It does neither. Each new year, for instance, begins with a change from the previous year.

To get down to fundamentals, probably the faults of the calendar are to be ascribed to the fact that it is a man-made contrivance that must perforce adjust itself to the greatest of nature's institutions, the universe.

Each year the printers of America get together on or near the 17th of January to celebrate the anniversary of the birth of their "patron saint," Benjamin Franklin. The fact is, however, that Franklin was not born on January 17. When you are in Boston, go to the City Hall, and you will find the entry on the records of Franklin's birth reads January 6. In the year 1706, when the event occurred, the calendar was eleven days behind what should have been its schedule. The same condition prevails in connection with all our colonial heroes.

We usually speak of "the" calendar, on the mistaken assumption that there is but one. As a matter of fact, many calendars have been devised and are in use. There are 17 calendars in India and numerous varieties in Africa. Half the world's population uses a calendar different from ours.

# RESEARCH BY THE CHURCHES

By DR. HANS SCHÖNFELD

*Director of Research, Universal Christian Council, Geneva*

## INTRODUCTORY NOTE

By DR. S. PARKES CADMAN

The Universal Christian Council for Life and Work, at its meeting in August, 1932, instructed its Research Department to undertake a study of Calendar Reform and the Stabilization of Easter. The main reason for this study, intended to place information before the Churches, was a League of Nations decision, according to which the Churches were asked for their opinion on the proposals for Stabilization of Easter. Pursuant to this decision, the Secretary-General of the League of Nations requested the Universal Christian Council to refer this question to its member churches.

In the following pages the Research Department gives a survey of the historical development of Calendar Reform, the reasons for it, and the latest authoritative proposals relative to it. Dr. Schönfeld's survey, which is available from his office in a somewhat fuller and more documented form, is based on official reports of the League of Nations and recent literature on the subject.

It should be pointed out that the League of Nations, in its discussions of the Stabilization of Easter, has carefully confined itself to the "social and economic aspects," expressly stipulating that any solution of the problem depends on the "free decision of the religious authorities."

OUR present calendar dates back to Julius Caesar, who, during his reign, in the year 46 B. C., substituted the solar calendar, already in use by the Egyptians, for the less exact lunar calendar. With the help of the Egyptian astronomer Sosigenes, Julius Caesar established a calendar of  $365\frac{1}{4}$  days. Each fourth year was to be a leap year with 366 days. The months had alternately 30 and 31 days; February alone, as the last month of the year, was given 29 days, with a thirtieth day added in leap years.

The Emperor Augustus, who could not bear the thought that the month dedicated to him should have fewer days than the month of July, so named in honour of Caesar, changed the distribution of the days of the different months. In the fourth century the Christian Church accepted this calendar. From that time onwards we have used a calendar which is based on a Roman Emperor's vanity.

Already in the Middle Ages it was known, by calculations that had been made, that a year does not contain a full  $365\frac{1}{4}$  days. Too many leap years had been intercalated, with the result that in the northern hemisphere the beginning of the year gradually became further removed from the shortest day. Pope Gregory XIII, after a careful study of the

question, ordained that ten days be deducted from the year 1582 as, compared with the Concilium of Nicea, the calendar was ten days ahead of correct time. The Gregorian Reform further laid down that in every 400 years only 97, instead of 100, extra or leap days should be intercalated. Protestant countries did not introduce the reform until the eighteenth century, after long experience had convinced them of the defects of the old calendar. Russia and other countries of Greek Orthodox faith did not give up the Julian calendar until after the Great War.

Even the Gregorian calendar does not correspond exactly with astronomical calculations. But a main objection to this reform, also, is that it does not take into consideration the important question of Easter. When the date for Easter was decided upon, the main consideration for the Christian Churches was that it should not coincide with the Jewish Passover. At the Concilium of Nicea, Constantine the Great fixed Easter for the Sunday following the first full moon in spring; however, no legal prescription was introduced, it was merely a recommendation submitted to the bishops, and was not universally accepted before the eighth century. Nevertheless, it is Constantine the Great who is responsible for our having an Easter, the date of which is subject to fluctuations owing to its dependence on the moon. Generally speaking we reckon time by the sun; when it comes to fixing the date for Easter we have recourse to the lunar system.

At the time of the Gregorian Reform certain Catholic priests pointed out how extremely desirable it would be to fix the date for Easter definitely while reforming the calendar.

Luther did not agree with the regulation in use, either. He said: "How much better it would have been to have dropped entirely the Mosaic law referring to Easter, rather than patch it up. They should have laid down a special date for the Passion, death and Resurrection, just as has been done for Christmas, Epiphany, Candlemas and other feasts which are fixed and not movable, so that everybody might know exactly, and without trouble or dispute, the dates of Easter and the feasts depending on Easter. . . . As things are now, we really need a further reform to correct the calendar and fix Easter."

Development of economic life in the last century has shown with increasing clarity that the Gregorian calendar contains grave defects and that the great variations of the Easter date are unfavorable for large masses of the population. Even before the war efforts were being made with a view to reforming the calendar and fixing Easter. The Evangelical Conference which met at Eisenach in 1900, the Sixth Prussian General Synod of 1909, the Congress of the Permanent International Committee of Chambers of Commerce and of Commercial and Industrial Associations held in London in 1910, the Paris Meeting of the same Association held in 1914, the 1909 Conference of the Hanseatic League and numerous other

organizations advocated calendar reform, to include the stabilization of Easter. In 1914, the International Chamber of Commerce submitted to the House of Commons a Bill for the Stabilization of Easter and for quarters of equal length.

In post-war years, a number of national and international organizations, among them the International Chamber of Commerce and the International Astronomical Union, again adopted recommendations providing for the introduction of calendar reform, and those recommendations were forwarded to the League of Nations. In 1923, the League instructed its Commission for Communications and Transit to deal with these problems, and a Special Committee of Inquiry was appointed. The Holy See, the Archbishop of Canterbury and the Ecumenical Patriarch of Constantinople sent one member each to represent them on the Committee, and in the course of the inquiry representatives of other churches and religious bodies were invited to participate in the Committee's labors. Furthermore, the Presidents of the International Chamber of Commerce and of the International Astronomical Union took part in the inquiry.

Problems of calendar reform were studied in detail. The replies to a questionnaire which had been sent to the churches were compiled in a preliminary report which was submitted to the Commission for Communications and Transit in 1926. In 1927 the Secretariat of the League of Nations requested the various countries, including the United States, to send in proposals for calendar reform. Thereupon a large number of countries set up committees to study the question and the work they accomplished was submitted to the Fourth General Conference on Communications and Transit convened by the League of Nations. The Conference went thoroughly into the social and economic questions which would arise out of a reform of the Gregorian calendar and the stabilization of Easter, and it further dealt with the attitude of ecclesiastical authorities and organizations.

In January, 1932, the Council of the League of Nations, acting on the recommendation of the Conference, decided to consult the religious bodies and authorities regarding their views on the stabilization of Easter and the proposals and measures referring to it.

The Continuation Committee for Life and Work had already dealt with the question of calendar reform and stabilization of Easter at its meeting held at Eisenach in January, 1929. It was agreed on that occasion that the churches should, when the time came, take part in the inquiry into these questions. At its Geneva meeting, held in August, 1932, the Universal Christian Council for Life and Work instructed the Research Department of the Institute to undertake an inquiry into calendar reform and stabilization of Easter. At the end of November, 1932, the President of the Universal Christian Council received a letter from the Secretary-General of the League of Nations, in which he was asked to inform the Churches affiliated to the

Council of the proposals of the League of Nations and to communicate to the Secretary-General their attitude not later than March, 1933.

#### DEFECTS OF THE PRESENT CALENDAR

The greatest defect of the present calendar lies in the fact that the months are of unequal length. Our calendar contains months consisting of 28, 29, 30 and 31 days, and corresponding quarters of 90, 91, and 92 days. As a result, comparative returns can only be drawn up by means of involved statistical calculations. Meanwhile present-day conditions of our social and economic life are such that it is often of paramount importance to establish quickly accurate statistical returns for certain periods. There is, for instance, a difference of 11 per cent between the length of February and of March, while, if holidays are taken into account, the difference is as much as 19 per cent.

Since the number of weeks in the year (52) is not a multiple of the number of months (12), the length of the months is bound to vary. The working classes are often paid weekly, but are obliged to settle their bills monthly: this divergence makes it difficult for them to distribute their earnings. In the same way, the number of working days varies according to the month and this leads to further discrepancies which often complicate social and economic statistics. An example of such a discrepancy is furnished by March, 1928, which had five Saturdays, and March, 1927, which had only four. A comparison between those two months would lead to wrong conclusions, particularly in certain business houses where Saturday's takings often represent 22 per cent of the turnover for the week.

As every month is not integrally divisible by its number of weeks, the days of the week have varying monthly dates, and this makes it impossible to know in advance with what day of the week a certain date will coincide. This necessitates use of special calendar tables and often means loss of time.

The dates of the feasts, especially that of Easter, change every year. There can be a difference of 35 days between the first date (March 22) on which Easter can fall, and the latest date (April 25). The following statement is from the report of the Special Committee of Inquiry of the League of Nations: "Many commercial transactions and transport services are severely prejudiced by the changing date of Easter; in particular, business dealing with textiles, articles of fashion, and the hotel-keeping industry, since Easter marks the beginning of the spring fashions and is an important date from the tourist point of view. If Easter is early, the weather of the northern hemisphere being unfavorable in the temperate zones at this time of year, traveling and changes in dress are postponed. If, on the other hand, Easter is late, there is more tourist business, but the textile trade in spring wear is severely injured, because summer articles are purchased at once. In a general way the organization of traffic and transport is disturbed by the changing date of Easter. If one year Easter comes in March, and in another

April, comparative statistics, particularly those referring to production and transport, are considerably complicated."

Scientists and business men are not the only ones interested in this reform. It is of special interest to educational authorities in some countries that the quarters of the year should be of the same length in order to distribute the school subjects equally over the whole year. Instead of that being the case, the school year, owing to the changing date of Easter, contains a varying number of weeks. The same disadvantages apply to judicial or administrative holidays.

The same drawbacks to which statistics on economics are subject affect figures concerning education and teaching, school attendance, expenditure on education. Here, too, irregularities of the calendar often result in misleading statistics. Where the beginning of the school year and the holidays change from year to year, the school timetables have to be drawn up anew every year. For this reason certain countries have introduced so-called "school months" consisting of four weeks of five days each, just as some factories and shops apply the four weeks' period for their business accounting. As the civil or church year runs in some countries from April 1 to March 31, it may happen that one year will include two Easters, and this also can be the cause of discrepancies and difficulties.

#### PROPOSALS FOR REFORM

More than 200 proposals for Calendar Reform were submitted by about 40 States to the Special Committee of the League of Nations. Many of the schemes, however, were merely variations of a few general types, while a considerable number proved to be incomplete or inapplicable. When the Fourth General Conference on Communications and Transit proceeded to examine the schemes they first of all eliminated proposals comprising improvements of too insignificant a character to constitute reform, after which they selected two main groups from which a further selection will have to be made.

These two main proposals are based on the fact that it is impossible to establish a calendar containing months and quarters of equal length from a year of 365 days and in that way eliminate the essential difficulties and lacunae inherent in the present calendar. Accordingly these plans propose adopting as basis a year of 364 days; while the 365th day would be considered as a special "Year Day." In leap years there would be two special "Year Days," which, it is proposed, should be public holidays. The following are the alternative plans put forward:

#### PLAN A (13-MONTH PROPOSAL)

Every month to contain four complete weeks, that is to say, 28 days. A given date would thus always fall on the same day of the week. The 365th day (Year Day) would be the day following December 28th; June 29th would be Leap Day. Under this scheme a thirteenth month (Sol) would be interpolated between June and July.

The plan offers the advantage that all the months are of equal length. The weeks in each month are complete, and in this way periods of earning and spending are of the same length. The same date always coincides with the same day of the week, and this facilitates the fixing of appointments for certain recurring periods. A further advantage would be the increased circulation of money values which would not only influence favorably the purchasing power of the business community but also be of direct and indirect benefit to large sections of the population. A considerable number of industrial, commercial and transport concerns have already introduced a kind of "auxiliary calendar" with a year of 13 months, in order to insure as far as possible the advantages offered by such a year.

The following are the main disadvantages mentioned in connection with the scheme: The carrying out of the scheme, compared with the present calendar system, would necessitate too great adjustments and would mean a break with time-honored customs. It is therefore more than likely that far greater opposition would be aroused against this calendar reform than to the other main proposal which maintains the 12-month year. The quarters and half-years would no longer comprise a certain number of complete months; for instance, a quarter would consist of  $3\frac{1}{4}$  months. The last day of the month, which is of particular significance from the point of view of accountancy, falls on a Saturday, a day that is already a heavy one in the ordinary course of things. It would be necessary to undertake the monthly stock-taking and monthly transactions and activities 13 times instead of 12 times each year, and this would entail increased labor. The introduction of the 13-month year would make comparison with past statistics difficult.

#### PLAN B (12-MONTH EQUAL-QUARTER REVISION)

This proposal aims at maintaining a maximum of the present system. The year is still divided into 12 months; in this way the quarters correspond to the divisions of the year. Each quarter-year comprises 91 days, made up of one month of 31, and two months of 30 days each. The whole year would thus have eight months of 30 days each and four months of 31 days each. In order to obtain this distribution of the days, one day would be deducted from March, May and August respectively, two days would be added to February and one to April, while the other months would remain as they are. The first month of each quarter would have 31 days, and would start on a Sunday. According to this scheme the 365th day would be a special "Year Day" (December Y) which might be proclaimed a public holiday; it would follow December 30, and in leap years the Leap Day (June L) would be intercalated between June and July.

The main advantages of this plan lie in the fact that the new system follows as closely as possible the present calendar system and would not call for such far-reaching adjustments as the other proposal. The plan admits of statistical comparison with returns of former years. The quarter-years and half-years are made up of an exact number of months and weeks, and each month comprises, if the special holidays are left out of account, the same number of working days, that is to say, 26. This facilitates comparisons considerably. The first month of each quarter, comprising 31 days, will have five Sundays, and the two following months will have four Sundays each. As each quarter begins on a Sunday and ends on a Saturday, the calendar will be constant, not only for every year, but also for every quarter, and it will be easy to determine on what day of the week any given date falls.

The principal objections which have been formulated are that under this scheme the various months have varying numbers of days and that none of them contains an exact number of weeks. Further, the dates of the successive months in any given quarter-year fall on different days of the week and not on the same weekdays, as is the case under Plan A.

The League of Nations Conference did not express an opinion in favor of either plan. This abstention was due to the fact that public opinion in the various countries hardly seemed ripe for calendar reform of the kind pro-

posed, and that certain outstanding groups in the field of government and economics had not yet defined their attitude. On the other hand, the Conference was practically unanimous in agreeing that the fixing of movable feasts was a matter of universal interest, and that the inquiry undertaken had shown that the leading sections of the nations had expressed a desire to see such a settlement effected.

#### STABILIZATION OF EASTER

Brief mention has been made of the historical decisions and events which led to the present arrangements with regard to the fixing of the date of Easter. Reference has also been made to the lacunae inherent in the system and to the criticism which the introduction and subsequent use of the Gregorian calendar called forth.

With reference to the general attitude of the churches and their representatives to the problem of whether Easter should, or could, be stabilized, a synopsis of the position is given below. It will be noted that the Orthodox Churches, in accordance with a resolution adopted in 1923 by the Pan-Orthodox Congress, are prepared to pronounce themselves in favor of the stabilization of the date of Easter. The Convocation of the Church of England adopted in 1925 a resolution of similar tenor. It would appear that, on grounds of dogma, the churches have no objections. It was not possible to obtain the views of each individual church, but the majority of Protestant churches have expressed their willingness to agree to stabilization. Expressions of opinion from the Federal Council of the Churches of Christ in America and from the German Evangelical Church Committee were submitted to the Special Committee of the League of Nations; and the Federation of Swiss Protestant Churches, in particular, when it met in 1924, referred to the stabilization of Easter as one of the most urgent reforms to be undertaken.

In that same year, and even earlier, various organizations and sections of public opinion had expressed similar views, including school and educational authorities in a large number of countries. A series of inquiries in England and America showed that an average of about 80 per cent of those whose views had been sought, expressed themselves in favor of the reform.

In Great Britain the Church of England has been particularly active in favor of a new system for fixing Easter. It undertook preliminary work as early as 1920 and brought the matter to the notice of the British Parliament. A consequence of these efforts was the passage in 1928 of a special Bill on the Stabilization of Easter, to be put in force following the official decisions of the Churches.

According to resolutions officially adopted by the Council of the League of Nations, Sunday following the second Saturday in April is proposed as the day for Easter. If this proposal were accepted, the date of Easter would

be subject to variation somewhere between April 9 and 15 (a matter of seven days), instead of the present variation between March 22 and April 25 (a period of 35 days). Such a marked limitation of the variation in the date of Easter would signify a corresponding regulation of the festivals and holidays whose dates in their turn depend on Easter, and similarly a number of inconveniences would be eliminated which the present movable date of Easter causes to various Church activities. These proposals are entirely in line with facts laid down in the Bill passed by the British Parliament. According to the clauses of that Bill a date was to be selected somewhere midway between the present limits of variation.

In connection with this proposal a further question was raised as to whether such an arrangement might not include the fixing of a *definite date* for Easter. The traditional date of April 7 for the Crucifixion is fairly generally accepted. That would mean April 9 for a stabilized Easter.

The adoption of the League of Nations resolution\* would signify the elimination of the very extensive variations at present possible in the date of Easter without, however, the introduction of a general reform of the calendar. Nevertheless, certain sections of opinion have expressed the view that the stabilization of Easter ought to be carried out *in connection with calendar revision*, or at least be linked up with such a reform. It

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\*MEMORANDUM: The following governments have formally endorsed the League of Nations' Easter Act, which "expresses the opinion that the common good, from a purely economic and social standpoint, would be served" by the stabilization of Easter: Albania, Australia, Belgium, Canada, Chile, Denmark, Egypt, Estonia, Finland, France, Germany, Great Britain, Greece, Hungary, Italy, Latvia, Luxembourg, Netherlands, Nicaragua, Portugal, Spain, Sweden, Switzerland, United States, Venezuela, Yugoslavia.

The following governments have declared that they do not desire to endorse the Act: Austria, Colombia, Irish Free State, Japan, Norway, Poland, South Africa, Siam. (Japan and Siam as Buddhist countries are not concerned with the Easter date. The other abstentions are probably due to a desire to refrain from expressing any opinion on a subject essentially religious, even though the League's Easter Act specifically leaves the problem to "free decision of the religious authorities.")

Following is the text of the American State Department's formal communication to the League of Nations: "The Acting Secretary of State takes pleasure in informing the Secretary General that the American Government endorses the ad-referendum vote of Dr. Marvin on the Act regarding the stabilization of movable feasts, on the understanding that this vote was in favor of the general purport of the Act, namely, that the General Conference thereby expressed itself as of the opinion that the common good, from a purely economic and social standpoint, would be served by such stabilization. The American Government feels that the desirability of stabilization from a religious point of view, as well as the method and dates of stabilization and all other questions relating thereto, are matters to be determined solely by the religious authorities concerned, and are not, in consequence, affected by its endorsement of the general purport of the Act."

The situation in the Churches, as summarized by the League of Nations, is as follows: "A majority of the Christian Churches have declared their willingness to accept Easter stabilization on condition that such a step should simultaneously be accepted by all the Churches. The Holy See emphasized that it did not think it possible, without very serious reasons, to depart from a time-honored religious tradition, but agreed that if it were demonstrated that the fixing of the Easter date would be universally beneficial, it was ready to submit the question to an Ecumenical Council. The Ecumenical Patriarchate of Constantinople informed the Committee that the Pan-Orthodox Congress had decided, subject to common agreement between the churches, that the Orthodox Church would be prepared to pronounce in favor of fixing the Easter date. The Church of England expressed the opinion that from the point of view of dogma, there was no reason why the Church should object to the choice of a fixed date for Easter. The Federal Council in America, the German Evangelical Church Committee, and the Council of Swiss Protestant Churches have shown themselves ready to accept it. The same opinion was forwarded by representatives of 82 Protestant churches or federations of churches in America, Austria, Belgium, Czecho-Slovakia, Denmark, France, Germany, Great Britain, Hungary, Italy, Lithuania, Netherlands, Norway, Poland, Roumania, Spain, Sweden, and Switzerland."

The Federal Council in America had taken no official action at the time of the above report. The League of Nations statement was based on an informal survey of church leaders in its constituency.

will be seen from the Report of the League of Nations that the official representatives of the churches raised no insuperable objections to a general reform of the Gregorian calendar, so that in any case up to the present no fundamental misgivings have been expressed by the Churches to a combination of the stabilization of Easter with a general reform of the calendar.

If either of the main proposals (Plan A or Plan B) were introduced, the acceptance of the League of Nations proposals would mean that Easter would fall on April 15. Certain objections have been raised to that date as it is a date when payments of rent, interest and taxes fall due, and this would interfere with the religious spirit of the festival. Those who voice these objections therefore propose April 8 for Easter, and this view is strengthened by the fact that April 8 is almost identical with the date that tradition assigns to Easter as the historical one. As opposed to that, reference should be made to the fact that in various countries the civil year starts on April 1. It is on April 1 that most apprentices and newly appointed employees take up their duties, so that the date plays an important part in the commercial world. If either April 8 or April 15 were selected for Easter, April 1 would be a Sunday.

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## LEADERSHIP IN ENGLAND

*By J. B. Perry Robinson*

Assistant Secretary of the Rational Calendar Association, London, England

**T**WO years ago reform of the calendar was regarded in England as the aspiration of a few cranks. It is true that the influential London Chamber of Commerce, the International Chamber of Commerce and other bodies had from time to time passed resolutions on the subject, but little publicity had been given to their resolutions. The movement had no central focus.

It has been one of the principal tasks of the Rational Calendar Association to remove prejudice. An article recently published by the London Times is one of many recent indications that reform on rational lines is now taken seriously in this country. It has been our purpose to show first that responsible bodies who have given thought to the matter have come definitely to the conclusion that the existing calendar is unsuited to modern conditions, and secondly that a reasonable modification which provides equality of the quarters and a perpetual calendar can remove most of the existing inconveniences without any recourse to a 13-month division.

In the past year the Rational Calendar Association has acquired such standing that bodies like the Federation of British Industries now refer to it all questions on the subject of the calendar. It is in close touch with a large number of organizations which are impressed with the desirability of reform, and it has drafted model resolutions which in many cases have been adopted and passed. The resolution recently passed by the Trades Union Congress, for example, "draws attention to the desire for a reform of the present calendar system."

The Association now has several hundred members. Its purpose is, mainly, to educate the leaders. In England, the popular attitude is very conservative toward new and untried substitutes for institutions that have stood the test of time. But the public will put its trust in its leaders, and when the time comes for action will follow their lead. If the rational equal-quarter calendar continues to win over the forces that mould public opinion, there is no doubt that it will succeed.

# ANOTHER FINANCIAL FALLACY

By H. PARKER WILLIS

*Professor of Banking, Columbia University*

Students of calendar reform owe a great debt to Professor Willis, whose previous contributions to the subject have included notable monographs in support of the 12-month equal-quarter revision from the specific standpoint of the banker and the economist. In the following article, the author analyzes one of the most puzzling arguments of those who propose a 13-month calendar; namely, that such a change would profit the business world by producing a "more rapid turnover of money." Professor Willis, as expert adviser to Congress, had a large part in the formulation of the Federal Reserve Banking system; he was for many years editor-in-chief of the New York Journal of Commerce; he now contributes a daily syndicated editorial to American newspapers on financial problems.

**J**UST at present there is a widespread tendency to develop plans for doing all sorts of impossible things by altering some piece of established custom or some mechanism that has worked well but been found inconvenient to special interests of one sort or another. There are projects for providing new money of many sorts, paying the government debt without much sacrifice, and above all overcoming the depression—all by some kind of economic sleight of hand.

In such circumstances, it is not strange that there should tend to be, in nearly every discussion or movement, a recurrence to artificial and erroneous standards and methods of doing things—a search for the "easiest way" or for meretricious reasons for given courses of action. This holds true in calendar reform as elsewhere, and it is entirely in line with current trends that there should be revival of those arguments in favor of a change of our calendar to a 13-month basis that have been weighed in the balance of good sense in years past and found wanting. Conspicuous among such lines of argument, is that which endeavors to appeal to the money-making instinct and to endeavor to persuade business men that there is a profit to be made in calendar tinkering. Surely there is an abundance of business men who need profits; and if they could be convinced that a 13-month calendar would produce real earnings, there would doubtless be an increasing crowd of converts to the idea. But before accepting a novel faith in this matter, it is desirable to weigh well and carefully the probabilities that the proposed alteration would do what it is advertised to accomplish.

First of all: Exactly what is it in the business way referred to that 13-month calendar advocates predict as a result of their system? It is what they term a "faster turnover of money." Within the recent past

there has been a renewed emphasis upon this aspect of the suggested movement which can be explained only as an outgrowth of depression conditions, and the desire to appeal strongly to the need of earnings by various types of business. As long ago as the *Report of the National Committee on Calendar Simplification for the United States*, which was submitted to the Secretary of State in 1929, it was officially asserted in that document, that under a 13-month plan of calendar reform, with 13 months of equal length:

"As there would be 13 monthly settlements during the year, there would be a faster turnover of money; the same business could be handled with less money."

The late George Eastman, Esq., in an article in the July, 1930, issue of *The Forum*, gave this notion his personal support by saying: "Now the new economic age must control its activities and to do so it must measure the performance of the past and future in units of time. Agriculture could be controlled by the accurate measurement of the intervals between equinox and solstice, but commerce and industry cannot wait for the leisurely succession of the seasons. Their decisions must be made more frequently. They are, therefore, obliged to use shorter periods of months and weeks. Thus the month and the week have attained a new importance in the calendar which they never had before."

Much to the same effect, Moses B. Cotsworth of York, England, widely advertised as having devoted "endless hours to a study of our calendar systems," asserts: "The times for earning and spending money would be equal. The monthly statement would show the truth in regard to business. Equal accounting periods would make it possible for both bankers and the business man to visualize the real state of affairs. The more rapid turnover of money would mean an immense saving to business generally."

Mr. Cotsworth is currently reported as repeating these views, and they have attained some special notice for the reason already mentioned—they are an offered way of increasing profits and bringing business back to normal by the easy road (or what is so regarded) of calendar change.

Let us see exactly what these statements mean. They are vague and general; but, reading between the lines and interpreting them in the light of other assertions of their authors, they seem to come to about this: At present, settlements are largely on a monthly basis. A business house sends out its account and gets payment 12 times a year. Other enterprises place their accounting on a monthly 12-times-a-year footing. If such payments and collections could be made oftener, the result would be to introduce more frequent settlement periods so that, assuming a *monthly basis of settlement to continue*, business would be able to collect

from its customers 13 times annually instead of 12. The "spread" between payments would be reduced and as a result, money would be more active, with corresponding reduction of the necessity of "carrying" customers and hence a reduction in carrying charges. Accordingly a faster circulation of "money" would be possible.

That this is a correct interpretation is attested by no less an economic authority than Professor Irving Fisher of Yale who says, quoting Mr. Cotsworth with approval: "By using 13 months of 28 days the rate of turnover of money is quickened; money for labor, salaries, rents, pensions and to pay for manufactures, wholesale and retail trade, railway and shipping charges, and so on, would circulate 13 times a year instead of 12 times."

Roger W. Babson asserts, with his customary penchant for accuracy and meticulous attention to detail, that: "Thirteen monthly settlements in the year would mean that money spent for rents, salaries, and monthly accounts would circulate nine per cent faster than it does now. . . ."

There is evidently no chance of misunderstanding of the character of the argument; and we may proceed to analyze it.

Exactly what do such assertions signify? They obviously suggest that the "rate of turnover" of money is something that can be entirely governed by the creditor element in the community. It may well be asked why then not call a week a month and so have a weekly settlement 52 times a year, with corresponding increase in rate of turnover? More properly still, we may ask; why not put all business on a *cash* basis and so cut the time of turnover to zero, raise the rate of turnover indefinitely whichever we choose to term the action so taken?

This latter question calls attention to the hollow basis of the suggestion itself, for every business man when asked why he does not go at once upon a cash basis will answer that he fails to do so because he has found that he will get more business and more profit by adapting his collection practices to the period of credit in his community instead of attempting to introduce an arbitrary standard. Exactly the same reply must be made with reference to the 13 settlements a year that are proposed. The only reason for supposing that there would be a saving in the new plan is the assertion without basis that our present settlement plan has no foundation except custom—that business is a slave to calendar arrangements and will continue to be controlled by them.

This of course is turning the whole issue upside down or putting the cart before the horse. People do not pay their accounts monthly or otherwise because the calendar is divided into 12 months, but because they are able to get the funds with which to pay as often as once a month. They could pay oftener only if they received incomes oftener and hence were oftener in position to pay. From another point of view, it is to be noted

that the period of payment in trade is fixed by the length of time required by the distributive system. A certain amount of time must elapse between the growing of the cotton in Southern fields, its picking, baling, shipping, receipt at the mill, production as a textile, sale to wholesalers, and eventually purchase and use by the consumer who ultimately pays for it. Each of these major operations has a definite period of credit and that amount of time represents the current requirements for carrying out the operation in question.

*Fixing the Credit Period.* What it is that determines this period of trade credit is in itself an interesting study. It is determined mainly by certain underlying factors which may be enumerated as follows: (1) Period required for harvesting and shipping of raw materials—a matter largely determined by physical factors, railway facilities, and the like; (2) period required for assembling and manufacturing the material—a matter governed by conditions of invention and the state of the industry; (3) period required for merchandising and distributing—a matter largely controlled by the system of selling prevalent in a country at a given time, the number of hands through which the products must pass in reaching the consumer, and the like. This is a matter dependent directly upon the trade habits of the community. It may be lengthened or shortened, to an extent; but only on condition that all factors in the merchandising process are willing to have the change made. It cannot be arbitrarily altered, as many a business man has found to his cost, loss of custom resulting whenever he sought to dictate to his customers, since the latter could not pay him any more speedily than they themselves were paid by those to whom they sold.

*Trade Period Economic Fact.* This survey makes it clear that, of the factors designated as important in fixing the time or period of payment of commercial obligations, none is arbitrary, and none is susceptible of hasty alteration because someone has decided to make the change. The first two classes of factors are natural or mechanical, and only the third is capable of alteration by design, while even there as indicated it is out of the question to get such a change as is referred to merely because someone wants it. To suppose that a fundamental alteration that would go deeply to the root of all business, changing even the terms upon which underlying business is done could be brought about automatically and almost unconsciously by such a step as a change in the calendar is worse than absurd.

*Probable Working of New System.* It is interesting, however, to inquire what would probably be the effects of such a change in the calendar as the introduction of a 13 months period, in so far as the influence to be thereby exerted upon business practice and technique in the settlement of obligations may be concerned. Suppose then that the suggested

change were to go into operation at once—what would be the result? Evidently all those commercial dealings stated habitually in days—thirty or more—would not necessarily be affected, but might go on independent of the introduction of a 13-month plan. Businesses habitually accustomed to sending out their claims upon the first of the month would doubtless do so, and would thus endeavor to obtain correspondingly prompt payment. They might succeed in collecting from their customers in that way for a short time. Evidently, however, they could hardly do so long, unless the customers were in a similar way “speeded up” in their receipts. Suppose for instance that all employers in the habit of paying by the month likewise made 13 monthly payments of wages, or 26 where a semi-monthly settlement was the custom—the employees would then be able to pay their debts once a month as before. However, all customers are not salaried employees, but are professional men, traders, merchants and others. There would be nothing whatever to increase their rate of collection and eventually they would find it difficult to keep up their payments to sellers upon a basis which was not compensated by a similar speeding up of income.

As a result, there would tend to be either a disorganization of credit payments, so that the first of the month was no longer accepted as the customary date of settlement or else perhaps some conventional date of settlement would be hit upon as the period of adjustment, as was once the case in rural England, and as is the customary situation in China.

That such a change would be injurious is evident. It is not true today that by any means all of the community are able or inclined to make their settlements on the first of the month, but as we have seen, many do, and it is this fact that has led calendar advocates to suppose that every one can be forced to do so by a mere alteration of the calendar. The putting of the present calendar into a position of such increased difficulty as regards payments, as to render settlements progressively less easy and less advantageous, would tend to reduce the practice of monthly settlement and to relax such influence looking to prompt settlement as habit and custom, based upon 12-monthly payments, today inspires and supports.

*A Basic Fallacy.* The question raised by the proposal to get a “faster turnover of money” by the process of changing from 12 to 13 payment dates per annum is even more vital than is suggested by these considerations with respect to calendar reform. It represents the same false notion of the nature of economic life that is reflected in a great many of the current remedies for depression conditions that are current in the community at the present time. In essence, the proposal is one that has the same relation to investment banking that the 13-month suggestion has to commercial banking—the latter a topic considered by the present writer in an earlier article in this *Journal*.

Investment banking is the process of placing current funds in long-term income-yielding forms which are held by the individual owner of wealth in the expectation that they will produce for him an income at a determined rate, payable at specified intervals. No doubt, every holder of bonds would like well to introduce an extra interest payment on his securities, once every 12 payments. Less desirable, but still to be sought, would be a plan whereby his interest might be paid at shorter intervals—say, once each quarter, instead of once every half-year, thereby giving him the advantage of compound interest. In the same way, savings-bank depositors naturally prefer to have their interest on deposits compounded as frequently as possible, so as to shorten the periods for which the funds are carried at simple interest, and thus to give themselves the advantage of earnings at compound rates, renewed as often as may be.

Why do not borrowers who issue bonds and savings banks which are desirous of increasing their deposits, at once inform depositors or bondholders, as the case may be, that they will be happy thus to make payments fall more frequently? Or why do not these customers and investors simply tell banks and issuers that they will insist upon the desired treatment under penalty of removal of their business? Of course, they would long ago have done so; or, what is the same thing, competition would have brought them (the customers) some such offer from financial institutions in a competitive situation had it not been that economic conditions would not produce the funds desired. At present, those who are liable on bond interest account are finding it anything but easy to meet their present obligations, while savings banks cannot earn the needful income to pay interest at present rates.

*Cash vs. Credit Settlement.* There is no individual or institution that can make something out of nothing; and, at present, the debtor class is suffering acutely from just such bargains as the 13-month calendar advocates want to make compulsory upon the entire community—bargains in which uneconomic understandings have been reached, resulting in a liability that cannot be met.

In many ways, it might be very desirable if all payments were to be placed upon a cash basis, thereby doing away largely with the banking function in modern life. This, however, is out of the question, unless each person or enterprise possesses his own capital, or induces others to enter upon business with him as participants and not as lenders. Neither situation is at all feasible, for obvious reasons, and even in a Soviet organization of society, the "carrying" function assigned to capital must be performed by such capital, whether that agency (capital) be owned by the state or private individuals.

Even a Soviet government could not bring about a situation in which the time for, say, seasoning lumber, manufacturing and then converting

it into the form of furniture could be reduced to zero, or a similar abbreviation effected in any other branch of modern production. No more could such a government or anyone else reduce the time within which trade processes are completed, wages paid, and the resulting settlements effected, by a mere arbitrary cut effected by some artificial means. The cut if made must be based on a preceding shortening of the actual production period.

*Two Classes of Settlement?* It is doubtless true that there are elements in the community which are able to curtail their present time of settlement and might be induced to do so, to the profit and advantage of the business man. It is a recognition of this fact which has led to the practice of granting what are called "cash discounts" to trade creditors. Such creditors are often allowed to pay, let us say, 2 per cent less if they return checks for the amount of their invoices within 60 days. Some of them do so, and the sellers are thus given an earlier use of funds than they could otherwise get. If a 13-month calendar were to be introduced, might it not at least operate to "speed up" payments on the part of those who are (as things stand) able to shorten the time of their payments? Would it not thus be practicable to obtain a "faster circulation" of funds, at least to the extent that funds were available and ready to engage in such faster circulation, though held back by the circumstance that, under present methods of settlement, they are not necessarily bound to submit to such a speeding up?

This, of course, is a far more reasonable supposition than the statement currently made that the results of a 13-month calendar would be those of speeding up all payments by nine (or some other) per cent. It would clearly involve, as we have seen, the corresponding tendency to throw back to a longer period of settlement all those who have less than the average ability to meet obligations 12 times a year. Disregarding this tendency to offset, probably entitled to far more than an equal weight or consideration however, let us examine the result of making such a twofold classification of customers and debtors—a relatively small class probably paying its obligations 13 times a year and a large group paying at other intervals. What would be the consequence? First of all, it is to be noted that those who can pay more promptly than is provided by the present 12 times a year system already, in most cases, do so. There is every inducement for them to pay as promptly as may be. Cash discounts, "sales" for cash, and nearly every other device that human ingenuity can employ, is resorted to with the purpose of getting prompter settlement. There is no warrant for supposing that an arbitrary establishment of a 13-month division of the year would effect something that the present numerous forms of inducement for prompt payment have failed to do.

But, assuming that a somewhat prompter period of settlement might be thereby induced, would there not at least be the possibility of some technical gain, as a result of the shortening of the period of adjustment now in vogue? Certainly not—unless we assume that, at the present time, sums of current funds are held perfectly idle by those who own them, notwithstanding that they could cut their indebtedness by prompt, or cash, payment. If the funds are actually being used in some other way, as, e.g., in loans or accommodations to others, in business transactions carried thereby instead of on bank borrowing, or even if the funds are left at the disposal of the bank between payments and thus (though theoretically idle so far as the owner is concerned) are really being used by the borrowers of the bank—there would be, generally speaking, no slightest advantage to the *community* through this “faster turnover” of money. The whole notion is thus fallacious.

*Unsound “Reform” Argument.* We ought not to leave this subject without some comment upon the dangerous practice of advocating reforms, even if possibly desirable in and of themselves, upon misleading grounds. The arguments thus put forward invariably go to seed as do other weeds; and, scattering their fruit around them, are followed by dangerous crops that result in bringing to naught much of the work of the careful educational husbandman who has been endeavoring to cultivate the general field of intelligence.

We see at present in the community multitudes of fictional and meretricious schemes based upon the same general premises as this 13-month calendar argument in connection with the suppositious “fast turnover” of money. Many of them are founded upon the thought that it is possible to make something out of nothing and hence the advocacy of methods and so-called “remedies” for economic ills which, on examination, turn out to run counter to the known indications of economic science. It is of course to be expected that argument of such a sort will be heard from those who have their own objects to serve in that way, but it should not come from persons who favor reforms which in their view will serve a purpose as the basis for more profitable and sounder operation of business or trade.

Those who have urged the “fast turnover of money” idea must be accordingly entreated to reconsider this line of advocacy, not merely from the standpoint of sound discussion of the calendar question, but also from that of careful and public-spirited discussion of current economic policy in general.

# KEEPING ANCIENT FAITHS

By GEORGE M. LAMSA

As an Assyrian, the author belongs to a race of people now almost extinct which carries on the Aramaic language and tradition which was the language and tradition of Jesus Christ. In his books and in his researches into recently discovered Aramaic texts of the Scriptures, he has won a wide acclaim for the amazing new light he has thrown on the life and teachings of Christ. A new book by him, entitled "My Neighbor Jesus," has just been published by Harpers.

OUR CALENDAR is more than a mere man-made measuring rod. It has traditions of deep meaning and significance in the history of the race. It has a religious meaning, too. For the calendar was instituted as a guide to note the times and the seasons, particularly in relation to worship. Priests were its founders and guardians. True, they were scientists and astronomers as well as priests, but first and primarily they were priests.

The calendar of today stands as a witness to their study and research, as a link between our learning and that of our remote forefathers. It is a tribute to men of the past who labored unselfishly and faithfully in the great task of devising a method of conveniently dividing up the year, so that man could record his past and plan his future.

Centuries before America was discovered, indeed even before Europe was inhabited by the races who now seek more or less successfully to live together in neighborly amity, the priestly astronomers of Babylonia, Assyria and Egypt had surveyed every space which was available to their naked eyes. They had studied the stars and the planets in the mysterious darkness of the skies; they had sought to explore the universe through its celestial bodies—not for commercial gain or pride of knowledge as is done today, but solely to learn more about God, in an effort to find a link connecting man and his Creator. It was their sacred and unselfish research which gave to modern man the foundations of both religion and science. And the calendar was the key to this endless quest of theirs.

Our calendar as we have it today is not very different in its essentials from that which was used in Babylonia and Egypt, the invention or discovery of those tireless savants of pre-history. It has served humanity for countless ages, and has withstood every attack that has been made upon it. It has proved itself. A change in it should only be undertaken in an attitude of due respect, both for its traditions and for its record of usefulness.

Russia under the Bolsheviks has tried tampering with the calendar

as it has tried revolutionizing all its ancient institutions. But I think any fair-minded observer will agree that the Russian experimentation has been hasty and ill-advised—certainly none of us want the new Russian calendar, with its five-day revolving week, adopted in this country.

Since the days of the Reformation, the western world has seen a series of changes, some of which have been beneficial, some ill-advised and harmful. Not even our religion, our institutions, or our social customs have been exempt from the spirit of reckless change. The forces which stood loyal and faithful to the preservation of the ancient order have been forced to give ground in many directions, and many an altar revered by the forefathers has been torn down. Tradition has been dubbed superstition, ritual has been damned as inefficiency, the precious arts have been forced to kneel to the machine.

Change is still the order of the day, and nobody will quarrel with changes that surely mean improvement. There are changes, however, that are too painful and costly for the benefits they bring, that perhaps sow seeds of hatred, bigotry and controversy. We are too filled with the restless modern spirit; we have a tireless energy in tearing down, in modifying, in destroying.

Let us make sure that while we are tearing out the weeds in our garden, we do not also uproot some of our best plants. While trying to adjust and correct the faults of our institutions let us seek to preserve jealously all the beautiful and sacred things in our social structure. Let us try to control our destructive instincts.

It is in something of this mental atmosphere that I have been studying the proposed plans for a reform of the Gregorian calendar. And I may note, in passing, that I am perhaps more aware than most of my readers of the faults of the present calendar, for I have lived a great part of my life in countries where many different calendars were in use side by side—the Julian and the Gregorian, the Armenian and the Coptic, the Syrian and the Mohammedan. During my lifetime I have watched the tendency toward unification making rapid progress, as the need for a single calendar was emphasized by dissolving boundaries between men and races due to the advance in rapid travel, commerce and communications.

There are some things about the Gregorian calendar which certainly should be corrected—the discrepancy between the lengths of the quarter-years, the divergence between the lengths of the months, the lack of any consonance between the incidence of weekdays and days of the month, the ridiculous wandering of the Easter date.

Some of these defects of the calendar are faults that have originated purely by accident. A vain Roman emperor transferred a day from February to his name-month, so that the latter should be as long as the longest, and thereby upset the whole balance of the quarter-years. The seven-

day week crept into Europe as a matter of popular convenience: it had been unknown in the days of Rome, when the calendar was established, and the super-imposing of this new unit on the old Roman calendar created difficulties that Cæsar could never have anticipated. The date of Easter was a churchly compromise conceived chiefly perhaps with a view to providing good moonlight to the pilgrims in an age when illumination for the nightly traveler was a difficult problem.

All these faults are matters that should be corrected, for they hamper the operation of ancient and honorable institutions. They have no value as traditions, they are weeds in the garden.

Not so, however, with the fundamental basis of the calendar, its division into twelve months. That, I insist, is sacred and ancient, more so, perhaps, than any other relic in our structure of religions and histories. For countless centuries it has been universally adopted by peoples of all creeds, races and cultures, without dispute. Even the unlettered savages divide their year instinctively into four seasons, and each season into three moon-periods or months. The four quarters of the year are symbols, like the four points of the compass, the four winds, the four corners of the earth, the four gospels. We cannot lightly throw away, in a new-fangled system of 13 months, a quarterly division of the year which is as astronomically sound as the year or the day.

Twelve, too, has a spiritual significance. Twelve months associate themselves in my mind with twelve tribes of Israel, twelve disciples of Christ, twelve signs of the Zodiac. The number thirteen means nothing to me or to anybody else—it is an exiled, unhappy number that we have no desire to see thrust continually in our faces.

I have not yet discovered a single good and sufficient reason for adding a thirteenth month to our calendar. I can find no real gain in spiritual or physical happiness that would result from it. It will not provide any additional food for those that are hungry, nor will it furnish work for the unemployed. It will not add a cent to anyone's payroll; it will not open factories which are closed; it will not increase the productivity of the soil or the results of man's labor.

No matter how the year is divided, time will remain just the same. Seasons will come and go exactly as they have done, without regard for man's puny efforts to tie them into a regimen or to card-index them into pockets in a filing cabinet. Man might conceivably divide the year into 26 months, as indeed is suggested by one group of reformers, but the moon makes her own division and will go on doing it according to the accustomed pattern. The days will remain the same length, however man sees fit to measure them. Man may register time, but time itself knows no days, nor months, nor years. It is one thing that man cannot harness, or control, or change.

I am glad, however, that the 13-month calendar has been proposed and is being actively propagandized. It will help the peoples of the Eastern world to accept the less radical changes proposed by the advocates of the 12-month equal-quarter calendar. Eastern inertia has got into the habit of opposing every change, but when two ways of change are offered, it is likely to oppose the extremest and accept the other.

The plan supported by The World Calendar Association seems to me an entirely logical and effective way of remedying every serious defect of the present calendar. The change will be acceptable to the world mainly because as a change it is so slight a one that within a comparatively short period few people will remember there has been a change. It adjusts every fault and makes our calendar a more perfect instrument for its purpose. It clears the calendar structure of alien growths that have tended to becloud its splendid traditions and purposes.

From the viewpoint of the churchman—and by this I mean not merely a churchman from the West, but one whose interest includes the other great bodies of religious thought and opinion—this slight change in the present calendar will make possible an important unification of Christian observances. It will naturally lead to an agreement between the great churches of East and West for simultaneous observance of the great feasts—Christmas, Easter and the numerous special days dependent on them. The importance of such an agreement, from the viewpoint of church unity, cannot be overstated.

No such benefit would be likely to develop from the radical upheaval contemplated by the advocates of a 13-month calendar. Not for generations, if at all, could the peoples of the East be expected to comprehend, understand or accept any such revolutionary bouleversement of their ancient habits. Past and present would be abruptly separated by a division line which would make reconciliations of dates and events well-nigh impossible. Assuredly the peoples of the East would resent any such change. It would embody all the worst features of a westernization of the calendar which they would certainly oppose instinctively with all the forces of their being.

On the other hand, The World Calendar, with its balanced division of the month and quarters, would be accepted without any serious or lasting objections. Its changes are so slight that the unlettered would hardly be conscious of a change. Yet it remedies all the serious defects of the present system and its perpetual feature would bring to humanity a permanent boon of convenience and efficiency.

# STORY OF THE CALENDAR

By DAVID THIBAUT

This is the first of a series of articles in which the author traces the evolution of the calendar from its earliest beginnings to the present time. His studies aim particularly to draw from this evolution the conclusions which are most important in the current discussions. In this article he takes the calendar up to the dawn of history. The continuation of his studies will appear in future issues.

## I

THE STORY of the calendar must go far back of recorded historical beginnings. It must tell not merely how man made the calendar, but also why he had to make it.

Revolve a wheel on a fixed axis. Make a mark upon the rim of the wheel. Make another mark at a fixed point, near enough to the wheel for accurate comparison. Assume that revolutions of the wheel will bring the first mark across the second at regular intervals. Give the intervals a name, subdivide them, multiply them. There is your primary time measuring device.

The spinning earth is such a wheel. The mark upon its rim is the Greenwich Meridian. A fixed star will do for the second mark. That is the nature of all time telling, and of all time-telling devices. But there are many instruments for applying this principle.

A pistol fires. The hand of a stop-watch twitches around a dial. The performance of race-horse, speed-boat, or running athlete is timed within the tenth of a second. Accurate? A scientist would laugh at you. He would point out the inaccuracies of clockwork, and the element of human error. He would recommend a chronograph. One type of this instrument utilizes the vibrations of a tuning fork for sub-dividing seconds. Timing to the hundredth part of a second is recorded by a needle-prick in a paper ribbon. The latest word in sub-dividing seconds? By no means. Needle and recording stylus cannot act instantaneously. The oscillograph, actuated by electric energy, is better. It is "practically" perfect for pure time recording.

With this and similar devices man measures, for instance, the movement of sound waves. Definitely he knows they travel a mile in five seconds through the air; through water in a fifth that time, and through steel fifteen times as fast. He checks the fifth of a second required for the uncharged transatlantic cable to "warm up" and deliver an electric impulse three thousand miles away. He measures the speed of a rifle bullet moving at 3,000 feet a second, and by spark photography obtains

as clear a picture of it as though it were stationary. He measures the speed of light flashing across space at the rate of 186,300 miles a second.

Thus man subjugates time today. What of yesterday? What was the size and the nature of this giant before man tamed him? How long has he busied himself with our world? What has characterized the imprint he has left upon all things—especially upon Life?

Take a tack, and thrust it into your table top. Attach to the tack a string, and picture that string stretching away into infinitude. Let the tack represent the present, the string the duration of time up to now. Let a mark on the string three inches from the tack represent the time of Columbus. Back more than 550 feet along the string would come the time of the Neanderthal cave man, and one would have to walk several miles along this imaginary string to place the time of the Dinosaurs. And of course the world was an old world and life was old life, geologically speaking, when nature fashioned these monsters.

Various ages have been assigned our globe, even by scientists. An initial period of thousands of years would suffice for the cooling and solidification of the earth's crust, they agree. Then rains would fall, rivers and lakes and seas would form. With no vegetation, no life upon earth, the denudation or wearing down of land surfaces would progress rapidly. The debris thus worn from the primitive crust would be swept out to sea, and laid down as deposits of sedimentary rocks. By measuring the present rate of formation of such deposits, by allowing for changed conditions, and by measuring the chemical content of sea water, geologists computed the earth's age at 300 million years.

Another school of estimators check the earth's orbit against that of the planet Mercury. They point out that stellar orbits become less and less elliptical, more and more nearly circular as the body contracts in its whirling. They figure an age for earth of 3,000 million years.

Here was the domain of Time's free youth! He peered from no calendar symbols through those cycles of creation. But he was busy. His work was rhythm, order. Scientific and theological interpretations of creation agree fully upon one point: when life came upon earth, it found order already established.

It is this rhythm and orderliness, this hammering of time upon earth in the pounding of tides, in the recurrence of seasons, in the alternation of day with night, in a million pulse-beats of action and reaction, which marked out the way life must take. And when life had come, blind and timid into the warm waters of the primordial seas, the hammer-beats continued. When life crept up out of the sea to begin conquest of the land, it fitted progress to the same rhythm: to tides, days, months, seasons.

What form had this first life when it wriggled in the Protozoic oceans? The form of a drop. Life began upon earth as it begins today, as a single

germ-thing, a blob of protoplasm or life-stuff. Bodies such as ours are made up of billions of these living cells. In our bodies these building bricks are wrought into special organs, into blood, bone, gray matter. But the earliest life upon earth with a single-celled animal. It multiplied by division—by one enlarging and breaking into two—as the tiny amoeba found in pond water does today—as microscopic bacteria do today.

Time, which had pounded insensate earth with its hammer-blows of rhythm made up of pulsing tides, recurring days and changing seasons, pounded life also. Life was poured into a mould of orderliness. As it evolved, it was cut and pounded into shapes by the die and the hammer of time. Orderliness and time-consciousness were its heritage and its constant mentors. What was moulded and pounded and bitten into those first blobs of protoplasm—those tiny single-cell animals—pulsed through the higher forms which followed. It pulses through man today. It is the true rhythm of the spheres.

But early life was not conscious life, as we interpret consciousness. Early life was acted upon by its surroundings. As it went forward toward higher forms it learned adaptation—learned to fit itself into circumstances and surroundings, that it might survive. Still it was blindly acted upon; and by nothing more positively than by those rhythmic hammer-blows of recurrence. The next stage was the era of conscious life,—evolution directed and guided by the mind of man.

## II

All life came out of the sea. It was swept out of the sea by waves, by tides. The tides are one pulse-beat in the hammering rhythm of time. All life was subjected to this rhythmic hammering. It still is subjected to it. The great danger to this first life-in-the-sea was the ever-present one of being stranded—or drying up. Millions of tiny sea-creatures were hurled upon land by waves; more were left trapped in tidal pools by the receding water. Incalculable billions of them were stranded.

Through the slow ages certain life forms learned to survive these conditions—learned to hold footing upon the solid shore. The floating seaweed took anchorage, then took root. Its limp, floating fronds stiffened into foliage similar to that of ferns today. Then this new life-born began marching away from the sea. New conditions called for new adaptations. Thus came the vegetable things of the land.

And in the marginal slime of the sea animal life, too, conquered land. Through low forms to higher, it came up out of mother ocean and moved inland, learning how to adapt itself to conditions as it moved. From the time of that first life in the sea to our age is perhaps a period of 80 to 800 million years. And every second of that time, the life-stuff—first in one form and then in another, but always the original protoplasmic life-stuff

—was being hammered by the come-and-go, the rise-and-fall, the dark-and-light, the thousand and one variations of time's recurrence pattern.

In what geologists call the Miocene Age—the era of mammals, grass and land forests—man emerged from his animal ancestry. This was not less than a million years ago. Many scientists place it at four to forty millions of years ago. But emergence from the animal did not mean immediate entry into the full estate of man. Chapters are missing from this dim beginning of our race's history. We shall only state, however, that early manlike creatures were infinitely lower types than the most primitive savage of today, and that it was not until 25 to 30 thousand years ago that the human animal acquired in full even the physical attributes he possesses today. And all of civilization was yet to be won.

"Let us imagine," says Professor Robinson, "that 500,000 years of developing culture were compressed into 50 years. On this scale mankind would require 49 years to learn enough to desert here and there his inveterate hunting habits and settle down in villages. Half through the fiftieth year writing was discovered and practiced within a very limited area, thus supplying one of the chief means for perpetuating and spreading culture. The achievements of the Greeks would be but three months back; the prevailing of Christianity, two; the printing press would be a fortnight old and man would have been using steam for hardly a week. The peculiar conditions under which we live did not come about until December 31 of the fiftieth year."

Before man could write, before he knew how to ornament the inside of his caves with the simplest drawings, he had learned to carry about in his head and hand down by tradition, a rude calendar. This calendar, of course, was no more than a dawning consciousness of recurrence of such phenomena as moons, seasons, floods, and natural forest harvests of fruits and nuts. How did the primitive brain achieve the knowledge that the white snow, melting away in springtime, would surely come back? That night must always follow day? That the vanishing fruits and migrating herds of game would return when the summer came again?

The old hammer-stroke rhythm of time gave man the seed of such knowledge. In his own body lay the knowledge, waiting until his new, specialized organ, the brain, could develop and grasp it. His heartbeats, the need of rest after hunting all day, the biological functions of his women, a thousand other subtler reactions tuned him to subjective time measuring. Gradually from these subjective perceptions, conscious division of time into named periods was born into human consciousness. Slowly, without drama it came. Man did not wake up upon a day in that past era and say, "Behold, snow will come after every summer. After migration the game will return. Tomorrow will bring the sun, as today brought it, up out of the darkness of the East. I shall sleep after eating

my fill beside the river at the same time tomorrow that I slept today."

No, that was not the way of it. Perception that the busy business of primitive life could be cut into patterns by conscious division of time was a slow development. Primitive man arrived at it through gradations. He came to divide time within his mind as a student pilot in a plane with dual controls comes to fly. As the pilot cannot tell when the plane passes from control of the instructor and becomes his own to handle, so primitive man could not tell when the time patterns, hammered into his very protoplasm, ceased to make the rhythm by which he lived, and permitted him to believe that he himself could make it—could perceive it.

But conscious division came, and man cut time into ribbons as he cut the reindeer skin, as he smashed into pieces the huge thigh-bone of the ox, the mastodon, the cave bear. Here and there one of those dawn men must have learned the trick faster than others learned it. What power it put into his hairy hands!

But suppose some one of those old fellows had discovered all by himself, and very suddenly, that power to divide time consciously—to measure it, predict it. It would have been a greater weapon in his hands than the fabulous "Death Ray" would be in a man's hand today. While the others of the family tribe vaguely guessed, he could have been sure. While they wandered forth seeking fortuitous contacts with mates, food, shelter, enemies, he would have gone forewarned, forearmed. He could have said, "When the women-kind go down to the watering place *tomorrow* as they went *today* and as they go *every day*, I shall lie in the thicket and await their passing. When the Old Man of the cave sleeps *tomorrow* as he sleeps *every day* after gorging his fill of meat, I shall fall upon him and destroy him."

But the knowledge did not come suddenly to any one man. That would have been magic. Magic is unearned knowledge. It is seldom permitted to man. But men often claim it, and often persuade their fellows that they possess it. In later calendar science, magic plays a prominent part, and becomes one of the religious mysteries to insure the dominance of the priests. But first the student should examine the uses which primitive man made of his knowledge of time division. As yet he was too innocent—too close to the stark facts of fang, forest, famine and food—to fall a prey to superstition. For a while calendar knowledge enjoyed with primitive man a place as utilitarian as the one it holds today.

### III

Man clings to concrete forms. He likes the feel of surfaces. He understands words best when they call to his mind's eye pictures of things, of acts with which he is familiar. Gradually he has weaned his language away from expressions purely concrete. He has added symbolism to it.

Today he can state very definite ideas in words that draw no pictures of things. He can, for instance, tell you of an adventure which he experienced upon a journey, and he can make the time of the incident stand out plainly in all time that has been, or is to be.

"We were three days out from New York," he may say. "It was exactly seven o'clock in the morning on April 23, 1931." How might the idea of this information be conveyed in the time-fixing methods of primitive man? Perhaps he would put it, "We were three sleeps toward the rising sun from New York. It was the time in which one cooks a handful of vegetables past sunrise, at the season of the swelling of the maple buds."

What are the striking differences in these two methods of describing the time of a happening? First, of course, we see the immense advantage of the modern system in its *definiteness*. It expresses relationship to *continuity* of time, backward and forward. The primitive man has fixed the time he wishes to describe in relation to the seasons, the sun and the duration of the common human action of preparing food. But the sun rises every day. We sleep every night. We prepare food every day, and it takes a varying time to cook vegetables. Maple buds swell, earlier or later, every spring. Thus from primitive time reckoning not only is immediate accuracy missing, but it has not fixed the happening in relation to any one unvarying point in the vast panorama of all time.

Note that our own modern reckoning has not only immediate accuracy, but has also this fixed point—the supposed time of the birth of Christ. There can be, in a given longitude, but *one* seven o'clock, April 23, 1931. Not only did primitive man lack a fixed point, but his mind was incapable of conceiving it, or of using it had it been presented to him. His dealings as yet were with the things his five senses could explore. Darkness and light could be weighed by his eye; his weary body needed repose. The grandeur and the homey warmth of the sun were early wonders to him, and the night a time of terror from the beginning. Therefore one of his first time divisions would be made accordingly, and the "day" would be designated. But his day was not a definitely accurate division of time. He might call it a "sleep," a "sun," a "darkness."

After early man had learned to reckon in days, he acquired the skill to count in lunar months. The moon is conspicuous, its periodic recurrence in the sky, its changes, undoubtedly excited early curiosity, held attention. From his observations of the moon, primitive man arrived at the first rough division of time into months.

At dawn and at nightfall, and throughout the night when he became a shepherd and a watcher of flocks, he could see certain stars. These attracted his attention later than did the spectacular sun and moon, but the tremendous importance of the stars in time-reckoning was felt long before recorded history began. Thence came the year.

Of what use to man was this new capacity for telling time? It was of incalculable value. It gave him markers in time such as he already had in space. Before he could reckon time, his contact with recurrent events was purely accidental, just as a blind man's contact with the furnishings and walls of a strange room must be. He might follow the herds of game, but he could not know that they would come back in seasonal migration. He might enjoy fruits, but he would have no knowledge of recurring seed time and harvest time. The power to divide time, even in the crude way possible to him, was a mighty step upward.

We see, then, that calendar science was a working science from the first. It was woven inextricably into the world's work. It grew with the growth of civilization, and it contributed immeasurably to this growth. A people too primitive to observe that seasons recur and natural phenomena repeat themselves, could not practice systematic agriculture, or even the simpler keeping of herds and flocks. But when man became convinced that spring does indeed follow spring after so many sleeps, after so many moon-ths (or months), after such-and-such trees have shed their leaves, he will venture to put seeds into the ground.

And here again, as always, there would be those who would learn faster than others. Who would learn so much faster than the average that their knowledge seemed miraculous. That would be one factor leading to priest-craft and superstition. Another factor would be the hazards of life in that early time, and the crudeness of all the marvels that existed.

Calendar science is a complicated business, drawing upon many sciences. Little as man knew about the "how" of things, it was infinitely more than he knew about the "why." That made him a groper. So superstition took hold of the calendar to its own ends. These ends were not necessarily bad, and certainly not wholly disinterested.

The calendar from the first was a useful tool in the hands of man. The time rhythm in himself taught man to note and use the time rhythm in the world about him. In the beginning the calendar was as utilitarian as it is today. But between that distant age and today lie thousands of years dominated by superstition. The seizure of calendar science by priest-groups was the next development.

To the modern student of the calendar, however, this initial stage of calendar development is of primary importance because of the emphasis it places upon the seasonal division in the calendar. From this time forward, there was a crystallization of calendar systems upon four basic time-spaces—the year, the season, the month and the day. Man's most difficult task was to adjust and reconcile these with each other. But the basic foundation on which he started was the seasonal year. And the 12-month year is as old as the calendar itself.

# FROM A PARISH PRIEST

By THE REVEREND EDWARD S. SCHWEGLER, D. D.

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This article is slightly abridged from the leading article in the January issue of "The Ecclesiastical Review," a distinguished and authoritative monthly magazine for the clergy, published "cum approbatione superiorum" by the Board of Trustees of the American Ecclesiastical Review for the Catholic University of America. In the introduction to Father Schwegler's article, he presents the attitude of the Holy See toward calendar reform, just as the late Father Tondorf, S.J., did in the April 1929 issue of The Ecclesiastical Review. The latter stated that the Holy See was invited in 1923 by the League of Nations to send a delegate to Geneva for discussion of calendar problems. A delegate was sent, Father Gianfranceschi of the Gregorian University, "to report the proceedings, but not to make any official statement." In 1924 the Papal Nuncio at Berne sent a letter to the League's committee which Father Tondorf summarized as follows: "In it the Holy See states that any changes which might be made in regard to the fixing of Easter, though they would meet with no objection from the point of view of dogma, would nevertheless involve the abandonment of deeply-rooted traditions from which it would be neither legitimate nor desirable to depart, except for weighty reasons or universal interest. The Holy See adds that it did not see any sufficient reason for changing what had been the perpetual usage of the Church, handed down by immemorial tradition and sanctioned by the councils from early times. Even if, therefore, it were shown that some changes in these traditions were desirable for the good of mankind, the Holy See would not be prepared to consider the question except on the advice of a forthcoming ecumenical council."

C ALENDAR REFORM is so broad a subject that it cannot be fully treated in an article of ordinary size. It must therefore be considered from various angles on different occasions; and this is clearly the proper place to present some of the advantages of such a new arrangement in a strictly ecclesiastical light.

As a practical theory to serve for the foundation to these remarks, the scheme advocated by The World Calendar Association may here be presented. The plan is remarkable for simplicity, symmetry and a minimum of change or innovation. Given dates would always fall on the same day of the week and in the same week of the year; and, vice versa, a given weekday of a given week and month always falls on the same date. The fact that the day of the week on which the first of the month falls is always known simplifies calculations, so that a number of things can be easily figured out by the new calendar which, by the old one, would necessitate quite intricate computations or consultation of half a dozen of our constantly varying calendar forms.

The World Calendar Association advocates Sunday, April 8, as the permanent date of Easter. The need for stabilizing the occurrence of this feast, or the desirability of the date chosen, will not be discussed here. It may be simply stated, however, that no exact demonstration of the historical date of Easter is possible, and that April 8 comes at a favorable time of the year, especially in northern latitudes.

On the supposition that we had this calendar as outlined, what would be the results? They would be many and far-reaching, especially for the Church and her priests.

In the first place, there would be no more doubt about the day and date of the week on which great church feasts fall. Christmas, for instance, would always come on Monday, and New Year's on Sunday. Both days would be preceded by a holiday: the former by Sunday, the latter by Year Day. Really, the only practical difference between this arrangement and our present situation when Christmas and New Year's fall on Monday, is that there would be six weekdays instead of five between the two feasts. The advantages to priests and to Catholics generally of a permanent holiday in conjunction with Christmas and New Year's are obvious. The week between these two festivals would not be so often broken up as it now is. There would always be a whole day of quiet and rest in preparation for two of the greatest church feasts in the year. And the usual heavy confessions at Christmas and the feast of the Circumcision would be divided over two days; or possibly, with such a permanent arrangement, they might all be taken care of on Saturday, December 23, and Saturday, December 30—which would leave the priest more free on the eves of the great festivals, and less fatigued on the festivals themselves.

Year Day, as also Leap Day, might become a holy day of obligation. On the former the present office for the Sunday within the octave of Christmas might be celebrated. Or the Church might establish a new feast and compose a new office—one for universal peace, let us say, or to honor Christ the Worker, as so many people have advocated lately. Something similar might be done about Leap Day.

Our holy days of obligation, by the new dispensation, would become as fixed as Gibraltar. At present it is impossible to remember either the day of the week, or the day of the month, or both for the six holy days we observe. By the new calendar this would be simple. There would be no difficulty about Christmas on Monday and New Year's on Sunday, and their dates would be the same as now. The familiar "Ascension Thursday" tells us the day of the week for this feast; its constant date, May 16, could either be remembered outright, or could easily be calculated in the fixed calendar for the middle Thursday in May. Of the three other holy days of obligation, the first two would occur on Wednesday (Assumption, All Saints' Day) and the third would come on Friday (Immaculate Con-

ception). The respective dates—August 15, November 1 and December 8—are already stable and familiar to all.

This consideration of the holy days, by the way, brings out one of the great beauties of The World Calendar. The latter utilizes all the ingrained, habitual knowledge of the calendar that we now have, and then builds up on that knowledge to produce the utmost regularity and symmetry.

A difficulty of our present calendar that causes our good Catholic housewives to grow grey prematurely is the irregularity of certain fasts and abstinence days. Ash Wednesday, of course, is sufficiently prominent not to escape notice; but it would still be a decided advantage to know that it would always fall on February 22. The ember days, however, are being continually forgotten, be the Sunday announcements never so emphatic, or the calendar fish never so large. These days are, at present, the Wednesday, Friday and Saturday after Ash Wednesday, Pentecost, the feast of the Exaltation of the Cross (September 14) and the feast of St. Lucy (December 13). Under the new arrangement they would be for all time: in the first half of the year, February 29 and May 29, March 1 and June 1, March 2 and June 2; and in the second half, September 20, 22 and 23, and December 20, 22 and 23. Or: they would begin on the last Wednesday of February and May, and the second last Wednesday of September and December.

Our American Catholics have great devotion to the Sacred Heart, as evinced by the widespread Communion of Reparation on the nine first Fridays of the month. By the present calendar a first Friday of the month coincides every so often with Good Friday, on which day Communion may not be distributed. As a consequence, many people have to break the stipulated series of consecutive first Fridays in certain years and begin all over again. This would never happen with the new calendar.

An advantage of the new arrangement that priests would undoubtedly welcome in particular would be the simplification of the breviary. Each of its four parts now contains a certain amount of repetition, due to the shifty habits of our present system. For example: the office for four of the six Sundays after Epiphany, which belong properly in the winter breviary, must be repeated in the fall breviary, in order to do service when there are not enough offices for the Sundays after Pentecost to go around. Again, it is necessary to repeat in the spring breviary all the dated feasts from February 9 to March 12, which have already been given in the winter breviary. This repetition alone is a matter of about sixty pages.

The new calendar would eliminate all such overlapping. There would always be four Sundays after Epiphany and twenty-six after Pentecost. The four Sundays of Advent and those after Epiphany and Pentecost, so capricious now, would all have definite dates, the first Sunday of Advent

being always December 3, and the first Sunday of Pentecost always May 26. Consequently, the parts of the breviary would not overlap any more, and there would be no more need of all the present repetition. Consequently also, the four bulky parts of the breviary could lose a number of pages, to the eventual advantage of the priestly muscles and the sacerdotal exchequer.

This latter desirable effect would be further produced by still another simplification. The present calendar causes a great many combinations and coincidences of feasts and so results in a deal of puzzling directions concerning the dignity of the feasts, the preference to be given them, when and how some mention of a minor feast is to be made on a major one, etc. All these troublesome rules could be just omitted in the up-to-date breviary. In fact, we might even be able to eliminate that troublesome chart of the ecclesiastical year which we know as the "Ordo." At the most, an "Ordo" of very small proportions, to be renewed only when it wore out, would be necessary.

Finally, the contents of the breviary would have a straight, chronological order. As the breviary now stands, there is one part for feasts that vary in date (*Proprium de Tempore*) and another part for feasts that come on the same date (*Proprium de Sanctis*). Therefore, he who would say Mass or read his office is forever skipping from one part of missal or breviary to the other. With the new calendar all offices indiscriminately could be placed in regular succession, for all would fall on the same date year after year.

The greater simplicity of the Church's calendar would be an advantage not only to the priest, but also to the layman from this strictly liturgical viewpoint. For at present many intelligent members of the laity try to follow Mass from the missal; and, owing to the complicated succession of days and feasts, often find this form of devotion rather difficult.

The fixing of Easter at a seasonable date would be an undeniable advantage in parish life. It would set a definite length upon our school semesters, and so aid in the making up of the yearly school plan. Schedules of meetings, parties and the like before or after Easter would be the same year after year. The seasonable date would offer more probability of fine weather and therefore of good church attendance on this greatest of ecclesiastical feasts.

The regular recurrence of Sundays and holy days of obligation would make for more reliable financial statistics in the parish. As it is, with holy days falling now on weekdays, now on Sundays, the collections for one year are not comparable with those of the following year (or month, or week, as the case may be), and it is impossible to gauge accurately the parish proceeds for any given period. By the new plan there would be the same number of Sundays and holy days every year, and they would

occur in their same relative position in every year. This would make for calculations and comparisons that would be reliable and exact.

Another financial point. With a permanent calendar there would be no need of putting out every year a parish calendar, as is done in many places; or one could be made up that would last over a long period and might be printed in large quantities. This would either eliminate or greatly reduce an annual expense.

Other advantages of a fixed calendar will doubtless occur to any priest who gives some thought to the proposal. This much at least is certain: that priests and the Church in general stand to gain as much as, if not more than, the secular world by calendrial reform, and that they should keep in touch with new proposals as much as possible. But, of course, any plan, be it ever so simple, flies in the face of tradition, and would have to be considered long and carefully. "Nihil innovetur nisi quod traditum est." Nevertheless, when Gregory XIII dropped ten days from the current calendar and legislated the reform for all Christendom, he instituted about as radical a change as one might well conceive. May it not be hoped that another Gregory will put his authority behind the growing movement to simplify further and standardize the calendar that has borne the name of a Pope for 350 years?

#### OBITUARY NOTES

**W**ILLIAM HENRY BLOOD, JR., vice-president of the Stone and Webster Engineering Corporation, died in Boston on February 13. He was 66 years old. Mr. Blood will be remembered by readers of the Journal of Calendar Reform as the author of a study of calendar reform from the business viewpoint, which was published in abridged form in the August, 1931, issue. He was a supporter of *The World Calendar*, and declared that its adoption would greatly decrease the difficulties encountered in statistical comparisons and lighten the labor of business enterprises.

Mr. Blood was a graduate of the Massachusetts Institute of Technology and a lecturer on Public Utilities at Harvard. He had been president of the National Electric Light Association, the Electric Vehicle Association and the National Conference for Standardizing Electrical Rules. Shortly before his death, the National Electric Light Association completed a study of calendar reform with special reference to the electric lighting industry, and a portion of its report is published in this issue of the Journal.

**R**EAR ADMIRAL WILLIAM A. MOFFETT, Chief of the Bureau of Aeronautics of the United States Navy, lost his life in the destruction of the dirigible Akron off the New Jersey coast on April 4. He had been an active advocate of *The World Calendar* for more than a year, having contributed a statement in the June, 1932, issue.

Admiral Moffett was born in Charleston, S. C., in 1869, and was graduated from Annapolis in 1890. He served under Admiral Dewey at the capture of Manila, and became chief of the Bureau of Aeronautics in 1921. He was awarded the Congressional Medal of Honor "for eminent and distinguished conduct in battle" at the capture of Vera Cruz in 1914. Later he received the Distinguished Service Medal "for exceptionally meritorious service in a position of great responsibility in the World War."

In regard to calendar reform he maintained that a revised calendar was inevitable. "The movement," he said, "seems to be making slow but steady progress. . . . The navigator wants a 12-month year, because 12 is a more convenient factor for the computations in which he is interested. The aviator is interested in this phase."

# EXCERPTS AND REVIEWS

## *Disadvantages of Thirteen*

By J. H. McISAACS

(From a Report by a Subcommittee on Calendar Reform of the National Electric Light Association, November, 1932)

**D**ISADVANTAGES of the 13-month calendar, as they would affect the procedure of light and power companies, are briefly:

1. The expense and trouble of changing. Expense would be non-recurring, but would be very real. Stationery forms would need revision and in order to get comparable statistics the last year under the present calendar would have to be analyzed on the thirteen month basis. The only alternative would be to ignore past records. The industry could hardly "start from scratch."

2. The "regularity" of the proposed calendar is over-stressed.

3. The monthly comparisons most useful are those which compare the same monthly period in successive years. The industry has sufficient seasonal variation in its various classes to make comparisons of successive months more interesting than valuable. Holidays would still introduce irregularities as between successive months.

4. Where quarterly or semi-annual reports are required, the fixed months will have to be broken into weeks. The indivisibility of the number 13 would tend to eliminate consideration of months and merely reduce the year to weekly divisions.

5. Interest and dividend rates and fixed charges would be more difficult to compute and accrue due to the indivisibility of 13.

6. Rate adjustments would have to be made. The extent of such adjustments would depend upon the rate structure. In general, the following results could be expected: (a) Flat rates would have to be decreased. Example: A rate of \$1 per month per socket for domestic outdoor night lighting (unmetered) would yield \$13, without adjustment, instead of the present \$12. (b) Block or step rates would vary slightly, the amount of increase depending upon the length of the steps or blocks. The shorter the step, the less the effect. Whether the present rates

could be maintained to defray increased expense, would require decision by the regulatory authorities. (c) Multi-part rates would be subject to change. The readiness-to-serve and demand charges would be affected, but the energy component would not. The greatest difference would be in the demand charge (or its equivalent in the form of a minimum charge).

7. One commentator has raised the question whether the public relations of the industry could withstand the stress that the wholesale revision of rate schedules would necessarily impose. That question cannot be answered categorically, nor can it be ignored.

8. The effect upon plant expenses is a matter of opinion and hence not subject to evaluation. There is little, if any, reason to anticipate any appreciable change.

9. Payrolls based upon hourly, daily or weekly rates would not be affected. Monthly and yearly salaries would entail extra expense. The extent of this effect would vary with the number and proportion of such salaried employees, but would be of major consideration only where monthly salaries predominate. Accruals of weekly payrolls to correlate them to monthly expenses would, of course, be eliminated. The saving thereby effected is equally a matter of conjecture.

10. Cost of handling customers' accounts would be seriously increased. One company has thoroughly investigated this phase and concludes that the expense of meter reading would increase 7.7 per cent. The expense of accounting and billing would likewise increase 7.2 per cent and the expense of collection 4 per cent. The increase for all three activities is estimated at 6.6 per cent. These estimates are based upon present expenses in an area which is predominantly urban and embraces over 560,000 accounts. 418,000 of these accounts are within a metropolitan area. This estimate is based upon a bi-monthly billing for residence customers who comprise 82 per cent of the total, and monthly billing for the other classes. The increase in expense will vary, as between companies, due to different billing periods, volume of billing, economic mechaniza-

tion of the process, and the concentration of the population served. Another company's estimate, based on monthly billing, fixes the increase at 8 per cent.

11. The work of preparing monthly statistical reports would be increased. Whether the saving through standardization of the months would offset the extra expense entailed in an additional set of reports per year is an open question, which individual companies must determine for themselves. In the utility industry, however, where statistics for individual companies rarely achieve such magnitude or uncertainty that indices supplant actualities, this saving cannot materialize. The net effect, therefore, is to increase the number of monthly reports from twelve to thirteen per year, or about 8 per cent. The increased expense entailed is, again, an item to be determined by individual companies.

12. What has been said of statistical reports applies with even greater force to the general bookkeeping departments of utilities. The industry is largely committed to the practice of closing the books each month. Under the proposed system an extra closing each year would involve an 8 per cent increase in the work and, very probably, a like increase in expense.

13. The effect of the thirteen month calendar upon meter installations, turn-ons and shut-offs is difficult to foresee. Whether the population served would move oftener, especially apartment dwellers, making added work, or whether the present volume of meter changes would be spread over thirteen periods, instead of twelve, is impossible to foretell.

### Spring Holidays

(Extract from *Edinburgh Evening News*,  
February, 1933)

ADVOCACY of a fixed Easter is likely to find a liberal amount of support from Glasgow this year. Hitherto, the Glasgow Spring Holiday has floated down the dates in company with Easter. This year it parts company.

At the behest of the Glasgow Presbytery and a number of the shopkeepers, the Magistrates decided that the holiday shall henceforth be the first Monday in April. But Easter Monday this year is not until April 17, and not only are Glaswegians faced with celebrating their day a fort-

night further away from the probability of good weather, but they are missing the prospect of a long week-end. Formerly, Good Friday was added to the spring break; this year the combination is split up.

### Religious Viewpoints

(Extract from *Southern Churchman*,  
December, 1932)

TIME seems to be one of the things that science cannot accurately work out. We all know the disadvantage of our irregular calendar and we all know that not having a fixed date for Easter, Christians are not as united as they should be. That anyone should think our present method of reckoning time as divine in origin seems ridiculous to us, but there are such souls.

That a year should have thirteen months does not seem right to our simple mind. That an even twelve month plan would be better seems logical. But we do feel that sentiment, whether of the religious type or otherwise, should not hold us back from true calendar reform.

### M. Bertaut's Report

IN the December issue of the Journal, a brief excerpt was given from the *Journal Officiel de la Republique Francaise* of the report on calendar reform presented to the French National Economic Council by M. Andre Bertaut, President of the Bureau of Transportation of the Paris Chamber of Commerce. The excerpt was incorrectly ascribed to "a report presented by the Minister of Foreign Affairs to the Economic Council." M. Bertaut modestly requests that this be corrected to read: "A report prepared on the request for information presented by the Minister of Foreign Affairs."

M. Bertaut, who is the foremost French expert on calendar reform, writes: "My objective exposition of calendar reform in this report does not represent public opinion in France. Public opinion, indeed, is still in general definitely opposed to any reform of the calendar." As M. Bertaut frequently has pointed out to the League of Nations, there is urgent need in France for a vigorous campaign of education on the subject.

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DURING the past few weeks there has been a notable increase in organizational interest in the study of calendar reform. Industrial, trade and scientific societies have taken up the question in convention and have passed resolutions, either favoring a definite plan for revision of the calendar, or directing organizational research through their executives or in committee.

The Ohio Editors Association, for instance, voted that "whereas proposals for calendar revision are now being internationally considered with a view to inaugurating a change in 1939, and whereas members of the Association are interested in these proposals and favor at least a moderate revision of the present calendar, Resolved, that the President appoint a special committee to study the subject with particular reference to the interests represented in this organization."

In Jacksonville, Fla., the annual convention of the Florida Institute of Accountants asked a committee to prepare a full report on calendar reform for submission to the members, and for discussion at the next annual meeting, to be held in June, 1933.

Power Engineers, meeting in Meriden, Conn., voted that "this Association, being an educational institution and composed of men responsible for the efficient and economical operation of power plants for all industries, having appointed a committee to investigate calendar reform which has reported in favor of such a change: Resolved, that this association favors the adoption of the perpetual 12-month calendar as proposed by The World Calendar Association."

In Springfield, Ill., the Central Warehousemen's Association declared its interest in "a moderate revision" of the calendar, and appointed a committee to prepare a discussion of the subject.

In Richmond, Va., the Lumber and Building Supply Dealers Association at a meeting in February resolved "that because of its manifold advantages we indorse The World Calendar, and lend our efforts toward its introduction in 1939." The Association made its action public with the following informal comment: "We all like the calendar revision suggested, and sincerely hope to be of some assistance in adding to the impetus the movement enjoys."

## FROM THE MAILBAG

See a great deal of advantage in a World Calendar plan over our present one. I am going to use it myself for certain personal purposes in order that my data might be comparable one year with another.—Prof. R. E. Post, South Dakota State College, Brookings, S. D.

For the statistical work carried on by this office the World Calendar seems to meet more favor than the International Fixed Calendar. The advantages which we see are those of having the same number of Saturdays and Sundays in the various months year after year. Automobile accidents occur in greater numbers on those days and therefore for comparisons of different periods, this arrangement seems satisfactory. The International Fixed Calendar, of course, would provide the same advantage but due to having thirteen months, it completely throws out of line any comparison between present statistics and those made up in years gone by.—Perry R. Taylor, Office Director, Pennsylvania Bureau of Highway Patrol and Safety, Harrisburg, Pa.

Before reading your publication I was inclined to favor the 13-month calendar, but after viewing the two plans as you present them I have been won over to The World Calendar with its 12 months and equal quarters as the most practicable plan for calendar reform from all standpoints.—R. H. Baer, Jr., Auditor, Spartanburg, S. C.

Calendar revision must come and The World Calendar seems the most feasible yet presented. Through press, platform and every avenue, the advantages of calendar revision should reach the people.—Lulah T. Andrews, State Director U. S. Employment Service, Omaha, Neb.

Am sincerely interested in the success of The World Calendar, as the nearest approach to the ideal.—Alex Ashley, Chief Division of Purchase, Sales, and Traffic, U. S. Department of Agriculture, Chevy Chase, Md.

I have been interested in the calendar reform proposal since it was first brought to the attention of the Federal Council of Churches. It is gratifying to see the

movement gaining headway despite the many imponderables standing in the way of so marked a change in the world's habits and customs. The solution of our chronological difficulties that is proposed by The World Calendar is so much less radical than the 13-months proposal, that it should commend itself to those conservative elements which so heatedly opposed the latter proposition.—Antonia H. Froendt, Secretary, Central Bureau for Relief, Evangelical Churches of Europe, New York City.

The mission is one of tremendous importance deserving of universal support, and I shall watch its progress with unusual interest.—Chas. A. Bauer, Statistician, Southern Pine Association, New Orleans.

Plan in recent publication appeals to me as best I have yet seen. It seems, however, like a long struggle against mass inertia to get such a change made.—S. W. Mendum, Economist, Bureau of Agricultural Economics, Washington, D. C.

Your plan is the best of various ones proposed.—Robert P. Dachy, Hillyard, Wash.

Strongly in favor of the work of The World Calendar Association. A revised calendar would recognize natural laws, thus conforming to the seasons.—Joseph Dunwoody, Y. M. C. A. Secretary, Troy, N. Y.

Interested in calendar reform but realize that a long period of educational activity is a necessary preliminary.—Eugene B. Patton, Statistician, New York State Department of Labor, New York City.

I am strongly in favor of the proposed World Calendar. There is much about it to commend it above the present calendar, or the proposed 13-month calendar.—Prof. L. A. Warren, University of Manitoba, Winnipeg.

Interested in this movement. Glad to be informed and take active interest in forwarding this movement. I appreciate its value in analytical work.—Nathan Cherniack, Statistician, New York City.

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